

## Adoption of Social Media in Victorian Local Governments

Khayri Omar,  
Faculty of Information and Communication Technologies  
Swinburne University of Technology  
Victoria, Australia  
Email: [komar@swin.edu.au](mailto:komar@swin.edu.au)

Helana Scheepers  
Faculty of Information and Communication Technologies  
Swinburne University of Technology  
Victoria, Australia  
Email: [hscheepers@swin.edu.au](mailto:hscheepers@swin.edu.au)

Rosemary Stockdale  
Faculty of Information and Communication Technologies  
Swinburne University of Technology  
Victoria, Australia  
Email: [rstockdale@swin.edu.au](mailto:rstockdale@swin.edu.au)

### Abstract

*The use of the Internet and social media tools by Australians has increased significantly over the last five years. Social media tools provide local governments with the opportunity to inform, serve and interact with their constituents on a level not previously possible. This paper uses a mixed method approach to firstly review current use of social media tools by Victorian local governments and secondly interview elected officials and administrators of four Victorian local councils about barriers to the adoption of social media tools. The results show that while 59 Victorian local governments (74%) are utilizing at least one social media tool, there are 20 councils (25%) that still do not utilize social media tools. The interviews indicate that the main barriers hindering social media implementations are: uncertainty, fear of risk, lack of knowledge and experience, lack of resources, lack of trust and, the culture of government. The main contribution of this study is a review of the current level of adoption of social media tools by Victorian local governments and identifies a number of barriers that prevent local government from fully utilizing the advantages of social media tools. Currently most Victorian local governments use social media to disseminate information.*

### Keywords:

Local Government, Social Media, Social Networks, Victoria, adoption barriers

### INTRODUCTION

The use of the Internet has become a normal daily activity for many people (Gibson et al., 2010). According to the Australian Bureau of Statistics (ABS), the percentage of Australian households with access to the Internet at home has continued to increase, from 64% in 2006-07 to 79% in 2010-11. Nearly three-quarters of Australian households now have broadband Internet connection (ABS 2011). The increase in access to the Internet has created an expectation that more information should be available on the Internet in the last 10 years. The use of social media has significantly increased as reflected in the statistics on social media use. There are more than 845 million monthly active users on Facebook at the end of December 2011 (Facebook, 2012), about 200 million on Twitter (Twitter blog, 2011), and over 3 billion videos are viewed a day on YouTube every day (YouTube, 2012). Social media is becoming the main channel for many people to get information. The Australian Government Information Management Office (AGIMO) reports Australians' use and satisfaction with e-government services shows that there are significant increases in use of a number of communication technologies compared with previous years, including social media and social networking sites (AGIMO 2012). Australians' usage of social media and social networking sites increased among all age groups from 36% in 2009 to 47% in 2011 (AGIMO, 2012).

Social media allows for, and optimistically encourages, governments to value civil society as a legitimate partner for change, and the effective use of social media tools is the real challenge for governments at this point (Williamson, 2011). Local governments are the third tier of government, and the closest to citizens, which means that it is the level of government that directly interacts and serves citizens. Local governments have to be where

citizens are to inform, serve, and interact with them (Scott, 2006). Governments have to meet citizens' demands if they want to stay relevant to them. Hence, governments have to meet citizens where they are now or risk losing the chance to stay relevant to their lives (Rudd, 2009). Yet, there are concerns as to how governments can monitor and control cross-channels of social media tools that they are using (Howard, 2011). While the overall tendency of social network use in Australia has increased, little is known about the level of adoption of social media by Victorian local governments have embraced these new technology platforms. With these factors in mind, the following two research questions are investigated in this paper: What are the adoption levels of social media tools among Victorian local governments? And what are the adoption barriers to that hinder further implementation?

Understanding the issues that Victorian local government face in the adoption of social media tools can assist other local governments in their adoption strategies. The adoption of social media is pertinent because around half of Australians (47 percent) are already using these tools for communication purposes (AGIMO, 2012). The paper is structured as follows: in section 2 an overview of social media is provided, section 3 reviews the issues local governments face in the adoption of social media. Section 4 outlines the research methodology that is divided into two phases. Phase one investigates how many local governments use this social media tools, what types of tools are used. In phase two elected officials and administrators from four Victorian Local councils are interviewed to determine the barriers faced by local councils in adoption of social media. The findings are discussed in Section 5.

## THE RISE OF SOCIAL MEDIA AND SOCIAL NETWORKING USE

Social media tools arise from the development of Web2.0 technology applications (Bonsón et al., 2012). Web 2.0 and its social media tools provide governments with a very powerful and an entirely new communication approach to change the way they communicate and stay relevant to their citizens (Department of Innovation, 2009). Bertot et al., (2010) argued that the main potential strengths of social media use in the public sector lie in their capability to be used as tools for collaboration, participation, empowerment, and time saving. In its report issued by the innovation department, the Victorian government perceive Web 2.0 as a tool that "gives a 21st century spin on Abraham Lincoln's adage: 'Government of the people, by the people for the people'" (Department of Innovation, 2009, ph 26)". Social media is being extensively adopted by the public sector around the globe (Noveck, 2009). Not surprisingly the Australian Federal government agencies have widely embraced these new promising tools. The latest AGIMO report (AGIMO, 2012), shows that the Australian Federal Government realizes the significance of the potential advantages of using such tools. The report shows that Federal Government agencies have widely embraced social media and Web 2.0 tools especially Twitter, Facebook, and RSS. Almost one hundred Australian Federal agencies already have official Twitter accounts including the Australian Bureau of Statistics (ABS), around fifty agencies have Facebook pages, and nearly 364 use news feeds via RSS. Consequently, Australian citizens' use of social networking sites to contact all tiers of government increased from 36% in 2009 to 47% in 2011. This growth is mainly driven by those citizens who are under 55.

AGIMO (2012) refers to social networking websites as the websites where people can create profiles about themselves and then communicate with others and form online networks. The increase in use of social media tools by Australians (Social Media News, 2011; Cowling, 2012; Lipowicz, 2011) reflects the popularity and significance of social media. The increased use provide government at all levels an opportunity to utilise these tools. Not only people can create and form networks on social media, government agencies can build their own online communities too. However, the picture is not clear about the level of use of social media platforms at state and local levels in Victoria,

Assessing the adoption levels of e-government is not an easy task, especially when it comes to dynamic platforms such as social media. Nevertheless, the adoption of e-government has been the focus of numerous studies since the rise of the concept in the 1990s (Dwivedi and Irani, 2009, Shareef et al., 2009, Orlikowski and Ackerman, 2008, Jaeger, 2003). Dwivedi et al.,(2012) stress that the e-government environment systems is much more complex than information systems and e-commerce systems, where government objectives are often formulated based on public value. The e-government complexity is driven by factors such as: social inclusion, transparency and accountability, fragmented landscape, legislation, lack of choice, no competitors, volatile public values, power is divided over different levels of government, and long term focus (Bharosa et al., 2008). Moreover, Dwivedi et al., (2012) argued that after the emergence of social media tools as a dynamic platform for governments to deliver services online, available information systems theories are not capable for the study of the concept although they are an appropriate start point if modified to fit specific situations. While there is some confusion of terms in the literature, in this paper we use the term social media to encompass social networking platforms and social media tools. Some examples of the most popular social media networking sites including: Facebook ([www.facebook.com](http://www.facebook.com)), Twitter ([twitter.com](http://twitter.com)), YouTube ([www.youtube.com](http://www.youtube.com)), LinkedIn ([www.linkedin.com](http://www.linkedin.com)), Flickr ([www.flickr.com](http://www.flickr.com)), and MySpace ([www.myspace.com](http://www.myspace.com)).

## THE ROLE OF SOCIAL MEDIA IN VICTORIAN LOCAL GOVERNMENT

Australia has a federal system with three levels of government: The first level is the national government based in Canberra; the second is the state level including seven states and territories each with its own state level parliament and the third level is government agencies and local governments (councils). The Local Government Act (1989) states that the role of a local government council includes; (1) A Council is elected to provide leadership for the good governance of the municipal district and the local community. (2) The role of a council includes: (a) acting as a representative government by taking into account the diverse needs of the local community in decision making; (b) providing leadership by establishing strategic objectives and monitoring their achievement; (c) maintaining the viability of the council by ensuring that resources are managed in a responsible and accountable manner; (d) advocating the interests of the local community to other communities and governments; (e) acting as a responsible partner in government by taking into account the needs of other communities; (f) fostering community cohesion and encouraging active participation in civic life (1989 Section 3D). By this Act (1989), Victorian local government is legally required to produce a council plan (corporate plan), this plan should outline what each individual council believes to be its priorities within its role.

The significance of social media lies in its ability for “connecting loose networks of association, bringing together otherwise disparate groups and individuals to support a common cause” (Williamson, 2011, p. 7). Social media tools can provide local governments with a very powerful and an entirely new communication approach to communicate with residents, which can facilitate the local government process on how they can achieve their roles. In the Victorian context social media tools, with their potential strengths, can help Victorian local governments achieve their role as stated by the Local Government Act (1989). For instance: In their study of understanding risks and benefits of social media in public sector, Picazo Vela et al, (2012) have illustrated the perceived benefits associated with social media including: encouraging citizens’ participation culture, encouraging affective collaboration and enabling better communications between citizens and government in a more friendly way, as a source of information to improve decision making, allowing governments to increase the knowledge about citizens, and serving as a tool for data collection or data completion (Role a), improving the review of specific issues or projects, and allowing feedback (Role b). Additionally, benefits allow for more transparent governments over the long term, creating better informed, more demanding, future voters and the generating of political capital because of accountability and transparency (Role c). Create a network, enabling the transfer of best practices between organizations, increase network interconnections between institutions (Role d & e). Allow the inclusion of citizens in the generation of content and information, attention to other kinds of users not reached before, increase confidence in the networks already established, encourage affective collaboration between citizens and government (Role f).

Both the Federal and the State governments have outlined similar processes on how Victorian local government would achieve its role included the facilitation of active citizenship, participation and engagement and by being responsive and accountable leaders. Using social media does not require specific technical skills; both government and citizen can now easily upload and share pictures, videos, and text and interact with each other about specific topics based on interests and receiving comments on their contents. A number of optimistic researchers argue that web-based technologies and social networking have the ability to improve government responsiveness, transparency, accountability (Coleman, 2001, Welch et al., 2004, Bertot et al., 2010), citizen participation, and overall satisfaction with the public policy-making process (Nabatchi and Mergel, 2010). Even though social media technologies can have a significant impact on government and citizen interaction, it also presents significant challenges.

## SOCIAL MEDIA USE ISSUES IN VICTORIAN LOCAL GOVERNMENT

Local government in Victoria operates within a legal, political and societal framework (Jones, 1989, Williamson, 2002, Worthington and Dollery, 2002, Dollery et al., 2006). While social media tools can provide local governments with a very powerful and an entirely new communication approach to communicate with citizens; there are some challenges that can delay its adoption or hinder local governments from using it efficiently. Determining which staff can use these tools and how to use them is one of the challenges facing local governments especially in emergencies (Chavez, 2010). Further challenges that could hinder the adoption of these powerful communication tools are identified by Jaeger (2010) as follows: **Redefining government boundaries** (the boundary between government and community is blurred); **Incorporating participation into governing** (processes and mechanisms needs to be developed for incorporating, vetting and acting upon comments, feedback, and other forms of participation); **Need for new policy structures, processes, frameworks and structures** (critical areas related to privacy, e-participation and democratization, access, and engagement); **Risks of polarization** (the potential exist for people to be selectively exposed to information which could lead to polarization of citizens).

Picazo Vela et al, (2012) have listed the risks associated with social media. These risks have been categorised under six headings. For example: Category (1) **General context**: including a) technological and digital illiteracy impacts the understanding of web and social networks, b) difference in communication styles (government officials vs. citizens vs. regions), c) inappropriate use of social networks, d) fear to establish direct communication with citizens. (2) **Institutional framework**: a) degree of government openness, b) lack of a regulatory framework for the activities related to social networks, c) bureaucratic process for dealing customer needs. (3) **Inter organizational collaborations and networks**: including the collection of experiences to improve responses. (4) **Organizational structure and processes**: a) employee in charge of answering to citizens should have enough knowledge and time to generate good answers, b) lack of support from management, c) lack of training for employees to use this kind of tools, d) loss of control of delivery of information, e) government officials lack a citizen-centred culture and open information. (5) **Information and data**: a) some information is sensitive and cannot be distributed, b) information opens the door to more questions. (6) **Technology**: including the technology infrastructure of the municipalities.

Even though there are many challenges and risks facing local governments in terms of using social media applications, in addition social media can create a huge paradigm shift in local governments, especially in management and IT areas which require them to implement new social media usage policies and technology to support the use (Chavez, 2010). The Victorian state government has realized the importance of social networking platforms, and thus the need of mindful adoption of its tools. In August 2010 Victorian State Services Authority published its guidance for the use of social media in the Victorian public sector. The guidance addresses both official and private use of social media. However, this guidance is based on high level principles and does not provide detailed guidance. Therefore, Victorian State Services Authority recognized that in order to implement social media at local level it needs to be supported by additional information and guidelines (State Services Authority, 2010). In September 2011, Department of Human Services (DHS) in Victoria released its social media policy for employees; this policy provides guidance to employees of the Department of Human Services about engaging in social media (Department of Human Services, 2011).

Local governments are the closest government tier to citizens. Thus, they are under pressure to use these new promised tools to achieve their duty and also to meet citizen's expectations on how to communicate and deal with government online. These new platforms are hosting public discourse between significant numbers of citizens in each single council and of millions of citizens around the nation. As any other tool, social media present new risks and rewards for governments. In order to gain the new web-based applications' rewards and avoid the risks, some of the Victorian local governments have begun using social media to share information and engage with citizens. Examining the types of tools that are in use, the adoption level of these tools? And what factors are hindering further adoption among all Victorian local governments is the focus of this paper.

## RESEARCH METHODOLOGY

This research has been conducted in two phases and a mixed method approach is employed to address the two research questions. The data were collected between September 2011 and May 2012. The first phase of the study addresses the social media adoption levels of Victorian local governments and is primarily quantitative in nature. In this phase we conducted a comprehensive analysis of the adoption levels of social media tools among all Victorian councils. Once a full appreciation of the Victorian local governments' web sites has been gained, we conducted the second phase. This addresses the research question of adoption barriers, using semi-structured interviews to search "behind the screen" issues and factors that contributes to or hinder Victorian local government adoption of social media tools. This phase is qualitative in nature derived from data collection in four selected case studies. In this phase face-to-face semi-structured interviews were conducted with local government elected officials and administrators (including mayors, councillors, executives, coordinators, and operators). The aim of this phase is to extend knowledge on local adoption of social media technologies focusing on the barriers that hinder further implementation.

*First phase*: Content investigation is a research technique to drive, rational, and measureable justification of the content of communication (Kolbe and Burnett, 1991, Krippendorff, 2004) in this case the social media technology use of Victorian local government. The list of Victorian local governments was identified from the councils' list and maps provided by the Department of Planning and Community Development (DOPCD) website (<http://www.dpcd.vic.gov.au/localgovernment/find-your-local-council>). Each city council was evaluated on its social media tools presence and types of use. For this research, all Victorian local government city councils were examined (79 councils). We began the study with a comprehensive analysis of all the Victorian local government websites to build a list of social media tools used by councils. All social media tools that were visible on councils' main websites were listed and counted. Social media tools included in this study were: a) Facebook b) YouTube, c) Twitter, d) Flicker, and e) RSS.

While analyzing councils' websites we noticed that some councils mention that they are using social tools in their website text but there is no signs or clear links indicating the use of these tools. Therefore, there was a need to conduct further research to determine whether they are using these tools or not. However, for research credibility, the second part of this phase was conducted on all Victorian councils by performing search engine searches for the social media tools used by each local government separately. Two methods were deployed to determine if a city council is already in the social space;

1) Google search. This search was performed on each of Victorian councils using three keywords: a) the city council name, b) the term 'council' and c) the social web site. So, for example, to perform a Google search on Frankston city council information about Facebook, the search terms would be 'Frankston, council, Facebook.' If a direct link was listed in the search, the link was visited and reviewed individually to determine if the link was a valid government site.

2) The second search was performed on social sites provide search engines (Facebook, YouTube, Twitter, Flickr) using the same key words used in the previous search for councils' usage. Again, the links were visited and reviewed individually to determine if the link was a valid government site. As a result, if any council was found using any of the four social sites, it was counted as the council using that social media tool. However, the use of RSS was accomplished only by analyzing the council websites. The findings summarized in Table 1.

*Second phase:* Data collection in phase two involved firstly selecting specific councils that had adopted social media and secondly, selecting individual participants within those councils. Research selection criteria included choosing councils that used some social media tools, but at different levels of social media adoption (Table 1). Within each of the four councils we selected officials who are involved in the Social Media adoption processes from different government levels (decisional, managerial, executive, and operational). Twenty participants were interviewed from the four different local governments and details of their roles are given in Table 2. Data collection from diverse levels contributes to illustrate more knowledgeable conclusions from a study (Scheepers and Scheepers, 2003). Coding followed Strauss and Corbin's (1990) use of open coding where data analysis involved iterative cycles of open coding, refining themes to determine a valid interpretation of the themes drawn from the data. This form of analysis was undertaken to overcome the high level of anecdotal studies that surround the topic of social media and to allow for evolution of themes from this exploratory area of social media adoption.

Table 1: levels of social media implementations

Council	Facebook	Twitter	YouTube	Flicker	RSS
A	X	x	x	x	x
B	X		x	x	
C	X				
D	X			x	

Table 2: Participants characteristics and roles

Participants' Role	Number of participants	Participants Code No
Decisional Level	7	2, 5, 8, 9,10, 19, and 20
Managerial Level	4	1, 12, 14, and 16
Executive Level	3	3, 7, and 17
Operational Level	6	4, 6, 11, 13, 15, and 18

## ADOPTION LEVELS OF SOCIAL MEDIA TOOLS

The usage pattern of five social media tools for Victorian local governments (79 councils) are shown in Table 3. However, not all the local governments have utilized the social media tools. While 59 Victorian local governments (74 %) are utilizing at least one of the examined tools, there are 20 local governments (25 %) that still do not have any presence on any of the social media sites or use RSS. It should also be noted that some councils have more than one presence on the same site such as Monash City council that has multiple accounts on both Facebook and YouTube. Results indicate that there is less adoption of social media tools in rural councils compared with that of metropolitan areas. While the rural regions have 48 local government areas, and the metropolitan region only 31, 15 of the 20 non-adopting councils are in rural areas. Furthermore, there is no rural council among the four councils who fully utilized the examined social media tools. Facebook is shown to be the most used tool by Victorian local governments with 50 out of 79 councils (63%), 35 local governments (44 %) use Twitter, while 26% have a presence on YouTube and 24% use RSS. Flickr, with 11% adoption rate, is shown to be the least used tool by governments.

Table 3. Victorian Local Government Social Networking Usage Results

Tools	No. of Metropolitan councils	No. of Rural councils	Total No. of councils	No. of Councils Percentage
Facebook	24	26	50	63%
Flickr	8	1	9	11%
Twitter	20	15	35	44%
YouTube	16	5	21	26%
RSS	12	7	19	24%

Overall, the results show low levels of adoption of these new technology platforms among Victorian local governments. The figures indicate that the majority of Victorian local governments are missing significant opportunities offered by these powerful new communication tools to facilitate the process of how they can achieve their required roles (including the facilitation of active citizenship, participation and engagement and by being responsive and accountable leaders). In missing the potential benefits of social media they are also not meeting citizens in an increasingly popular environment in which they interact and thereby risk losing the opportunity to stay relevant in their lives. Social media applications such as Facebook, Twitter, and YouTube gives government a chance to interact with citizens who may never visit their main website, to respond to them, share information and even hear ideas from them. Government should be present where the citizens are, they should be active on the most popular social networking websites (Howard, 2011). Social media is a two-way communication medium, where the main purpose for local government is to interact with citizens. There are indications from the analysis of the existence of the social media tools that the majority of councils are adopting social media as a method of disseminating information, that is as a noticeboard to post information to their citizens rather than to interact with them. Despite this, there are early indications of some more innovative uses such as Frankston council's use of YouTube as a TV channel. The content uploaded to the channel are categorized under these playlists; Youth, community, events, business, major projects, lifestyle, visiting, and connecting identities. This is one example of visible interaction.

## IMPLEMENTATION BARRIERS TO FURTHER ADOPTION

In order to understand why the levels of adoption of social media use are at these low levels within the Victorian local governments, we conducted approximately 20 interviews with the elected officials and administrators in areas related to social media implementation in four selected councils. These interviews produced a number of findings that align well with the earlier research on low adoption levels of social media tools. These findings clarify the reasons behind findings and, the lessons learnt from the local government point of view. Based on the analysis of the interviews, it was found that a number of barriers are hindering the adoption and implementation of social media tools in the Victorian local governments. These barriers are categorized and discussed as follows: a) uncertainty, b) fear of risk, c) lack of knowledge and experience, d) lack of resources, e) lack of trust, and f) the culture of government.

### Uncertainty

Our findings show that Victorian local governments are still unclear about many areas that are essential for fostering the adoption and implementation of social media tools. Participants indicate that the objectives that councils will meet by using social media tools are ambiguous. They feel that there are many questions that need to be clarified including: How social media should be implemented? How is it going to help the residents or the council? And what are the drivers for its implementation? One of the interviewed expressed that uncertainty as: *We have a number of barriers to jump..... It's not a question of relevance. I think people understand the relevance. It's just "Do I really need to? Or why should I? Or what's the compulsion? Or what are the drivers?"* (Participant 10)

The participants also assert that local governments need to know how social media can be managed. Local governments are not certain about the effectiveness of existing online service policies in social media use, for example whether they need to capture and store the conversations on social media platforms or not, and if they should store it, how that can be done and should the government use the official language on these platforms or not. One of the managerial level participants articulates that as: *I was asking the other day about a social media policy because I think that's another thing that needs to be addressed as to how we manage the story. So ... when you've got people conversing electronically, it's a record that belongs to us if they're talking to us. I've got to find out a way of how we can capture that and store it for our historical records because that's a thing that Council has to do. .... But how we save the social media is another story, because it really needs to be saved in some format.* (Participant 16)

Moreover, local governments question whether the use of social media will deliver value and how its value can be measured. Victorian local governments are uncertain about why they should implement social media, yet questioning whether they really need it. A participant from the executive level expresses the above concerns in his comment as follows: *I do wonder about the cost benefit trade-off. Once you move into that space quite heavily you need to service it, and in servicing it, how do you measure the benefit of what you get back?.. And how do you even know the difference of what's working, and what's not, on the social media?* (Participant 7)

### **Fear of risk**

Victorian local governments see the use of social media as risky. Thus, even though they support the adoption and implementation, they feel that they need to be cautious. The participants expressed that their cautious is driven by many factors. One of these factors is the possibility of using social media tools anonymously. This feature might encourage the inappropriate behaviors against the government and councils. They think that by implementing official social media channels, councils might provide great platforms for such behaviors where the loss of control over content itself is another concern. Moreover, there is a fear of the possibility that special interest groups might hijack these tools for their own agendas. One of the participants indicates these concerns as follows: *There's also a lot of distrust and dislike of government, and a perception of government interference. As a result we also get a lot of negative feedback, and with then the capability to be anonymous on the web reduces some people's inhibitions about inappropriate behavior on the web. Now it's not to say everyone, and not to say that it invalidates the good stuff that can come from it. But you could imagine one of the risks would be if you're running a consultation and there's some really important things in there that you're wanting to articulate ... but it gets almost overtaken by a small group, or a person, that has very strong opinions that are inappropriately expressed, swearing, or making allegations about people, or just in some way trying to dominate the whole thing. In some ways you've just given them a platform to have a go at council.* (Participant 7)

The participants clearly stated that these kind of risks could lead to further risks such as creating just more work for the council with no real benefit for both the community and the council, as it is expressed by the following participant *"I push back, because I have said before there is a real risk .... creating ... more work for yourself with no real benefit at the end"* (participant 12)

Victorian local governments feel that they are not ready yet to deal with these risks especially that social media platforms require immediate and continued actions and responses which they feel that they are not able to provide currently. In addition, the main areas of risk seen by the Victorian Local governments are: a) anonymity of users, b) lose control over the contents, c) hijacking social media tools by specific interest groups, d) organizational readiness, and e) just creating more work for the council.

### **Lack of knowledge and experience**

The participants have linked the lack of knowledge and experience of social media technologies to three different stakeholder groups. First group is the local government councillors who make decisions on whether the council needs to implement the social media tools or not. Second group is the executive members and employees who are responsible for operating, controlling, and monitoring these tools. The third group is the citizens who use these tools.

Our findings show that the age, unfamiliarity, and lack of knowledge about social media tools are hindering councillors and executive to approve social media tool use. One participant expressed the lack of knowledge as follows: *the barriers are as I said before the age, of our executive members, and their lack of knowledge, and experience around social media and online technologies, ...the same issue with our councillors, because they are the ones who make decisions in the end about what we do and what we do not do and their age and experience with social media is not necessarily that great. So it really is about educating and explaining to them as well.* (Participant 12)

While, the participants acknowledged that citizens use these new technologies, however many of them are still unaware about what can be posted publicly and what should not. This lack of knowledge can cause a lot of disruption and generate huge unnecessary work. One of these lacks of knowledge implications highlighted by participant 13: *On our Facebook page someone got on and talked about a child protection issue which they saw and they said maybe the Council can help, and all these personal details started coming up. Then it meant that staff here had to address that and spend a lot of time on it ..... It was very private information that someone chose to put [on Facebook] and may or may not have implicated - it was implicating Council even though maybe it wasn't relevant to [Y] Council. It was on the [Y] Council Facebook page. So the lines there can be blurred and then those sorts of things can go up and everyone else can see that.*

As a result this kind of action makes councils' officials more cautious about the implementation of these new communication technologies.

#### **d) Lack of resources**

In practice setting up a new council social media account is an easy task. However, each account needs resources (staff and finance) to be operated and managed. The findings of this research indicate that the lack of resources is one of the main factors that hold back the local governments from adopting many social media accounts and tools. Currently, activities on social media websites are allocated to existing staff. Participants put forward two reasons: lack of funding and the councillors and lack of understanding the real work load associated with managing and operating social media accounts. The perception of additional workload will prevent employees from initiating and implementing social media tool use. Participant 15 refers to this barrier as follows: *It's the daily monitoring and responding which takes up a lot of time and we struggled to be prepared for that and we have to try and work it into our already stretched work day. It comes back to resources. I just think it's a whole new project which needs the dedicated resource to it and we're unfortunately not in that position.* (Participant 15)

Another participant expressed similar concern as follows: *We could probably be more advanced. One of the barriers is we don't have the resources to maintain the content on the social media pages and to just get on and moderate and to interact. We just don't have enough staff to do it.* (Participant 13)

#### **Lack of trust**

The findings also show that while social media tools are considered a great way to reach and communicate with residents by Victorian local governments, nonetheless they have indicated a lack-of-trust in social media tools. The Victorian local governments make official agreements with vendors that provide for example content management systems and build the councils' websites. However, local governments cannot enter into such agreements with the providers of social media tools and specifically on how the content information will be used. Participant 13 from management level expresses these concerns as follows: *But with these social media type platforms it's a lot harder to do that. It's all their way. We don't have a say on how we use it. It's their rules and that's it. We have to abide by it ..... How do you know they then can't use that for target marketing, sell it away?.... you're at the mercy of this other big giant and they can do anything to you. They've got a huge usage guideline on Facebook which you can read..... They can change that at any time and that's a danger.*

These concerns seem to slow and limit the implementation options as is expressed by one of the executive participants as *"At a [...] level, I'm still not sure about social media. It comes down to ultimately trust and so forth as to how you operate... we're going to get a social media officer. I'm happy to support it, but my view to them has always been just be cautious.* (Participant 3)

#### **The culture of government organizations**

Government culture is another barrier that is delaying the implementation of social media in the Victorian local government. While social media are spontaneous and instantaneous, it appears that government is taking a conservative approach towards it. This barrier appears in one of the participant's statements: *There's been a whole lot about us not knowing, trying to learn what it means to be involved in social media. I guess it's just taking a conservative approach to jumping on. It's not like saying "Let's just jump on board and let's see what happens". We've spent a lot of time watching what's happening, seeing who's involved, and learning. Learning rather than just going for it, and then taking it from there.* (Participant 5)

Furthermore, governments need to adjust to and develop a culture of public information sharing and openness. The government culture of keeping the information and speaking publicly is expressed by one of the participants as follows: *Once it's in the social media, you really can't stop it going ...to] other people, where you can control it better if you don't give it to them. But I think that's a good thing. I think information should be made available, but I think there's a fear. I think our executives probably are a little bit politically shy.* (Participant 16)

### **REFLECTIONS ON SOCIAL MEDIA USE IN VICTORIAN GOVERNMENT**

Our findings show that approximately three-quarters of Victorian local governments are using some form of social media. Whilst there are significant differences in the types of tools and how they are used, there are ongoing attempts to create channels of communication between local governments and their citizens. The barriers to more extensive adoption and, perhaps more mindful use, are reminiscent of previous research into e-commerce adoption barriers (Ebrahim & Irani 2005). There are, however, differences in that our current research addresses technologies that are more ubiquitous, easier to access, and more intuitive to use (Omar et al., 2011). This research also addresses the local level of e-government; an area that is not traditionally known as an innovative user of IT, but where we find early adoption of the more popular tools. Local government in Victoria is attempting to gain advantages of connecting with citizens despite the barriers that are identified in this paper. The uncertainty and fear of the risks are hindering their ability to wholeheartedly embrace the new technologies and lack of knowledge and resources raise barriers to more innovative use. The conservative culture of local gov-

ernment and the consequences of losing the trust of citizens are powerful inhibitors to social media use, although we found that the issue of trust lay more with the lack of control over social media providers than with ceding control to citizens. Nevertheless, the lack of control over citizens' social media activities have led to instances of inappropriate postings that contain sensitive, personal information that has become publicly available. Inappropriate or challenging behaviour by the public that requires addressing by local government employees is seen as a resource problem (causing extra work) by those interviewed rather than a trust concern. There are also several instances where interview participants articulated the risks in facilitating citizen interaction that enabled small groups to attempt to exert undue influence over certain issues, or simply encouraged offensive and bullying behaviour. Addressing such activities adds to the workload of council employees and hinders the development of more social media adoption; both within and across local governments where older, more senior, staff and councillors remain uncertain of the benefits that can be gained. We found no recognition that such unsocial behaviour may exist beyond a local government's control and that engagement may be a more effective strategy than conceding the social media environment to an unchallenged arena of communication between local activists. The concerns expressed in regard to trust, resources and risks may be an indication of why local governments are not progressing innovative use and why their activities tend towards the dissemination of information rather than promoting interactivity.

Faced with a range of barriers that influence the ability of local governments to use social media more extensively or innovatively, we note that there are efforts to respond to the challenges of the new technologies. The characteristics of social media appear to be well suited to the local governments' need to meet their legal requirements to promote facilitation of active citizenship, participation and engagement.

Local governments have significant difficulties to overcome in adopting social media and gaining benefits from their use. Nevertheless, a high proportion of Victorian councils are engaging with the technologies and achieving some level of innovation in their use. Their challenge lies in extending adoption rates and taking full advantage of the potential offered for communication and interaction with a range of stakeholders.

## CONCLUSIONS

This research shows that the overall use of the five social media tools by Victorian local governments remains relatively low and that nearly 40% of the councils do not use any of the Web 2.0 social media sites to reach their online audience. Those that do use the tools tend to concentrate on disseminating information, using mainly Facebook and Twitter. The type of tools adopted accords with the use of Web 2.0 tools by the Australian Federal Government (AMIGO 2012) although the use of the tools is significantly lower than the Federal Government. With the rise in their citizens' use of social media, Victorian local governments are faced with a number of barriers that inhibit their taking advantage of these valuable tools to communicate, interact and disseminate information to their constituents. Despite their adoption efforts, the Victorian local governments' are hindered by implementation barriers identified as uncertainty, fear of risk, lack of knowledge and experience, lack of resources, lack of trust and, the culture of government organizations.

## LIMITATIONS AND FUTURE RESEARCH

This exploratory study addresses the adoption barriers of social media and does not examine the quality of use of these tools. There are extensive opportunities for research into the implementation and use of social media and e-government at both local and national levels. The concentration on one State in Australia precludes any generalizability beyond Victoria and further studies are required to extend the research into other states and territories. Further research into other countries would enable insights into how other government areas are progressing with their adoption of social media and allow for the development of theoretical constructs that would support more in-depth studies into local government use of social media.

## REFERENCES

- AGIMO 2012. Australians' use and satisfaction with e-government services-2011. *In*: DEREGULATION, F. A. (ed.). Department of Finance and Deregulation.
- AGIMO 2012. Government 2.0 Primer. Available: <http://agimo.govspace.gov.au/page/primer-v1/tools/> [Accessed 22 Feb 2012]
- Australian Bureau of Statistics. 2011. *Household Use of Information Technology, Australia, 2010-11*. Available: <http://www.abs.gov.au/ausstats/abs@.nsf/0/192B7AFC26FF3538CA25796600152BDF?opendocument> [Accessed 07/01/2012].

- Bertot, J. C., Jaeger, P. T. & Grimes, J. M. 2010. Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly*, 27, 264-271.
- Bharosa, N., Feenstra, R. W., Gortmaker, J., Klievink, B. & Janssen, M. 2008. Rethinking Service-Oriented Government: is it really about services? In: BOUWMAN, H. (ed.) *Let a thousand flowers bloom*. Amsterdam: Ios Press.
- Bonsón, E. 2012. Local e-government 2.0: Social media and corporate transparency in municipalities. *Government information quarterly*, 29, 123.
- Chavez, C. 2010. *A new way to communicate with residents: Local government use of social media to prepare for emergencies*.
- Coleman, S. 2001. *Bowling together: Online public engagement in policy deliberation*.
- Cowling, D. 2012. *Social Media Growth Australia – 2011* [Online]. social media news. Available: <http://www.socialmedianews.com.au/social-media-growth-australia-2011-infograph/> [Accessed 16/02/2012].
- Department of Human Services. 2011. *Social Media Policy For Employees* [Online]. Department of Human Services. Available: <http://www.dhs.vic.gov.au/about-the-department/documents-and-resources/policies,-guidelines-and-legislation/social-media-policy-for-employees> [Accessed 13/02/2012].
- Department of Innovation. 2009. *Web 2.0: The New Tools for Democratic Conversations – A snapshot of Initiatives in Government* [Online]. State Government of Victoria: Information Victoria. Available: <http://www.egov.vic.gov.au/government-2-0/web-2-0-the-new-tools-for-democratic-conversations-a-snapshot-of-initiatives-in-government.html#1> [Accessed 23/06 2012].
- Dollery, B., Crase, L. & Johnson, A. 2006. *Australian local government economics*.
- DOPAC. 2011. *How councils work*. Department of Planning and Community Development. Available: <http://www.dpcd.vic.gov.au/localgovernment/guide-to-local-government/how-councils-work> [Accessed 29/05 2011].
- Dwivedi, Y. & Irani, Z. 2009. Understanding the adopters and non-adopters of broadband. *Communications of the ACM*, 52, 122.
- Dwivedi, Y. K., Weerakkody, V. & Janssen, M. 2012. Moving towards maturity: challenges to successful e-government implementation and diffusion. *Data base*, 42, 11.
- Ebrahim, Z & Irani, Z. 2005. E-government adoption: architecture and barriers. *Business Process Management Journal*. 11(5), 589-611
- Facebook. 2012. *fact sheet* California. Available: <http://newsroom.fb.com/content/default.aspx?NewsAreaId=22> [Accessed 22/02/2012].
- Gibson, R. K., Williamson, A. & Ward, S. 2010. *The Internet and the 2010 election: Putting the small 'p' back in politics?*, London, Hansard Society.
- Howard, A. 2011. Open Government 2.0: Government of, by, for, and with the people. *Interactions*, 18, 16.
- Jaeger, P. T. 2003. E-government around the world: lessons, challenges, and future directions. *Government Information Quarterly*, 20, 389.
- Jaeger, P. T. 2010. Engaging the Public in Open Government: Social Media Technology and Policy for Government Transparency. *Federal register*, 1.
- Jones, M. E. 1989. *Managing Local Government: Leadership for the 21st Century*, North Melbourne, Hargreen Publishing Company.
- Kolbe, R. H. & Burnett, M. S. 1991. Content-Analysis Research: An Examination of Applications with Directives for Improving Research Reliability and Objectivity. *The Journal of consumer research*, 18, 243.
- Krippendorff, K. 2004. Content Analysis: An Introduction to Its Methodology (Book). *Personnel psychology*, 57, 1110.

- Lipowicz, A. 2011. *Agencies question value of social media* [Online]. Federal Computer. Available: <http://fcw.com/articles/2011/12/20/government-agencies-going-more-social-but-still-worried-about-roi-survey-says.aspx> [Accessed 11/02/2012].
- Local Government Act. 1989. Available: [http://www.legislation.vic.gov.au/Domino/Web\\_Notes/LDMS/PubLawToday.nsf/95c43dd4eac71a68ca256dde00056e7b/245b3a079796d111ca2578db001b6778!OpenDocument](http://www.legislation.vic.gov.au/Domino/Web_Notes/LDMS/PubLawToday.nsf/95c43dd4eac71a68ca256dde00056e7b/245b3a079796d111ca2578db001b6778!OpenDocument) [Accessed 04/02/2012].
- Nabatchi, T. & Mergel, I. 2010. Participation 2.0: Using Internet and Social Media Technologies to Promote Distributed Democracy and Create Digital Neighborhoods. *J. H.*
- Noveck, B. S. 2009. *Wiki Government*, Brookings Institution Press.
- Omar, Khayri; Scheepers, Helana; and Stockdale, Rosemary, "How Mature is Victorian Local Government: An Overall View" (2011). *ACIS 2011 Proceedings*. Paper 82. <http://aisel.aisnet.org/acis2011/82>
- Orlikowski, W. J. & Ackerman, M. S. 2008. *Using technology and constituting structures: A practice lens for studying technology in organizations*
- Picazo Vela, S., Gutiérrez Martínez, I. & Luna-Reyes, L. 2012. Understanding risks, benefits, and strategic alternatives of social media applications in the public sector. *Government information quarterly*, 29, 504.
- Rudd, K. 2009. Equipping the Australian Public Service for Australia's Future Challenges. *The Australian Journal of Public Administration*, vol. 69, no. 1, pp. 1–8
- Scheepers, R. & Scheepers, H. 2003. Contexts of Relevance in Explanatory Case Studies in Information Systems: Ubiquitous Information Technology Implementation in Organizations. *ICIS*.
- Scott, J K. 2006 " E " the People: Do U.S. Municipal Government Web Sites Support Public Involvement? *Public Administration Review*.
- Shareef, M. A., Kumar, U., Kumar, V. & Dwivedi, Y. K. 2009. Identifying critical factors for adoption of e-government. *Electronic Government, an International Journal*, 6, 70-96.
- Social Media News, 2011. *Social Media Statistics Australia – September*. David Cowling Available: <http://www.socialmedianews.com.au/social-media-statistics-australia-september-2011/> [Accessed 12/01 2012].
- Social Media News. 2011. *40 Interesting Facebook Stats* [Online]. Social Media Assistant. Available: [http://www.facebook.com/note.php?note\\_id=141377535935074](http://www.facebook.com/note.php?note_id=141377535935074) [Accessed 05/01/2012].
- State Services Authority 2010. "guidance for use of social media in the Victorian public sector."
- Strauss, A. C. & Corbin, J. M. 1990. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*, CA, US, Sage Publications, Inc.
- The Age. 2012. *Facebook value seen at \$100b as IPO nears* [Online]. The Age. Available: <http://www.theage.com.au/business/world-business/facebook-value-seen-at-100b-as-ipo-nears-20120128-1qmp1.html> [Accessed 29/01/2012].
- Twitter Blog. 2011. *200 million Tweets per day* [Online]. online: Twitter. Available: <http://blog.twitter.com/2011/06/200-million-tweets-per-day.html> [Accessed 10/02/2012].
- Welch, E. W., Hinnant, C. C. & Moon, M. J. 2004. Linking citizen satisfaction with e-government and trust in government. *Journal of Public Administration Research and Theory*, 15, 371.
- Williamson, A. 2011. Driving CIVIC Participation Through Social Media. *European Workshop Perspectives of Web 2.0 for Citizenship Education in Europe*. Brno, Czech Republic.
- Williamson, D. 2002. *What Price Citizenship? The Impact of the Kennett Government Reforms on Democracy, Citizenship and Local Governments*, Melbourne, Victorian Local Governance Association.
- Worthington, A. & Dollery, B. E. 2002. An analysis of recent trends in Australian local government. *The International Journal of Public Sector Management*, 15, 496.
- Youtube. 2012. *Traffic Statistics* [Online]. YouTube. Available: [http://www.youtube.com/t/press\\_statistics](http://www.youtube.com/t/press_statistics) [Accessed 12/02/2012].

## **COPYRIGHT**

Omar, Scheepers & Stockdale © 2012. The authors assign to ACIS and educational and non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ACIS to publish this document in full in the Conference Papers and Proceedings. Those documents may be published on the World Wide Web, CD-ROM, in printed form, and on mirror sites on the World Wide Web. Any other usage is prohibited without the express permission of the authors.